Page 1 of 31 Permit No. WA0037788

Issuance Date: <u>January 29, 2001</u>
Effective Date: <u>March 1, 2001</u>
Expiration Date: <u>February 28, 2006</u>
Modification Date: June 20, 2002

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM WASTE DISCHARGE PERMIT NO. WA0037788

State of Washington DEPARTMENT OF ECOLOGY Olympia, Washington 98504-7775

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.

# Cowlitz Water Pollution Control Plant (Cowlitz Sewer Operating Board)

207 Fourth Avenue North Kelso, Washington 98626-4189

<u>Plant Location</u>: <u>Receiving Water</u>:
467 Fibre Way Columbia River

Longview, Washington 98632

Water Body I.D. No.:

WA-CR-1010

Plant Type:

Discharge Location:

Latitude: 40° 5' 52" N

Longitude: 122° 5' 52" W

Activated Sludge

is authorized to discharge in accordance with the special and general conditions that follow.

Kelly Susewind, P.E. Southwest Region Manager Water Quality Program Washington State Department of Ecology

## TABLE OF CONTENTS

		<u>Page</u>
SUM	MARY OF PERMIT REPORT SUBMITTALS	4
	SPECIAL CONDITIONS	
S1.	Discharge LIMITATIONSA. Effluent Limitations B. Mixing Zone Descriptions	5
S2.	MONITORING REQUIREMENTS  A. Monitoring Schedule  B. Sampling and Analytical Procedures  C. Flow Measurement  D. Laboratory Accreditation	8
S3.	Reporting and recordkeeping requirements  A. Reporting B. Records Retention C. Recording of Results D. Additional Monitoring by the Permittee E. Noncompliance Notification	10
S4.	FACILITY LOADING  A. Design Criteria B. Plans for Maintaining Adequate Capacity C. Duty to Mitigate D. Notification of New or Altered Sources E. Infiltration and Inflow Evaluation F. Waste load Assessment	11
S5.	OPERATION AND MAINTENANCE  A. Certified Operator B. O & M Program C. Short-term Reduction D. Electrical Power Failure E. Prevent Connection of Inflow F. Bypass Procedures G. Operations and Maintenance Manual	13
S6.	PRETREATMENT  A. General Requirements B. Wastewater Discharge Permit Required C. Identification and Reporting of Existing, New, and Proposed Industrial Users D. Industrial User Survey D. Annual Submittal of List of Industrial Users E. Duty to Enforce Discharge Prohibitions	16
S7.	RESIDUAL SOLIDS	18

		Page
S8.	ACUTE TOXICITY	19
	A. Effluent Characterization	
	B. Effluent Limit for Acute Toxicity	
	C. Monitoring for Compliance With an Effluent Limit for Acute Toxicity	
	D. Response to Noncompliance With an Effluent Limit for Acute Toxicity	
	E. Monitoring When There Is No Permit Limit for Acute Toxicity	
	F. Sampling and Reporting Requirements	
S9.	CHRONIC TOXICITY	22
	A. Effluent Characterization	
	B. Effluent Limit for Chronic Toxicity	
	C. Monitoring for Compliance With an Effluent Limit for Chronic Toxicity	
	D. Response to Noncompliance With an Effluent Limit for Chronic Toxicity	
	E. Monitoring When There Is No Permit Limit for Chronic Toxicity	
	F. Sampling and Reporting Requirements	
S10.	ADDITIONAL CHEMICAL ANALYSIS OF INFLUENT AND EFFLUENT	25
	A. General Requirements	
	B. Monitoring Requirements	
	C. Protocols	
	D. Quality Assurance/Quality Control Procedures	
S11.	OUTFALL EVALUATION	25
	GENERAL CONDITIONS	
G1.	SIGNATORY REQUIREMENTS	26
G2.	RIGHT OF INSPECTION AND ENTRY	
G3.	PERMIT ACTIONS	
G4.	REPORTING A CAUSE FOR MODIFICATION	
G5.	PLAN REVIEW REQUIRED	28
G6.	COMPLIANCE WITH OTHER LAWS AND STATUTES	
G7.	DUTY TO REAPPLY	
G9. G10.	REDUCED PRODUCTION FOR COMPLIANCEREMOVED SUBSTANCES	20
G10.	DUTY TO PROVIDE INFORMATION	
G11.	OTHER REQUIREMENTS OF 40 CFR.	
G13.	ADDITIONAL MONITORING	
G14.	PAYMENT OF FEES	
G15.	PENALTIES FOR VIOLATING PERMIT CONDITIONS	
G16.	UPSET	
G17.	PROPERTY RIGHTS	30
G18.	DUTY TO COMPLY	30
G19.	TOXIC POLLUTANTS	
G20.	PENALTIES FOR TAMPERING	
G21.	REPORTING PLANNED CHANGES	
G22.	REPORTING ANTICIPATED NON-COMPLIANCE	
G23.	REPORTING OTHER INFORMATION	31
G24.	REPORTING REQUIREMENTS APPLICABLE TO EXISTING MANUFACTURING,	2.1
G25	COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS	31

## SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S3.	Discharge Monitoring Report	Monthly	January 31, 2001
S4.E.	Infiltration and Inflow Evaluation	Annually	June 30, 2001
S4.F.	Waste load Assessment	Annually	June 30, 2001
S6.D.	Industrial User Survey	1/permit cycle	June 30, 2004
S6.A.	Pretreatment	1/year	September 30, 2004
S7.B.	Residual Solids Management Plan	1/permit cycle	January 31, 2004
S8.E	Acute Toxicity Effluent Characterization	2/permit cycle	June 30, 2004
with Permit Renewal Application			December 31, 2004
S9.E	Chronic Toxicity Effluent Characterization	2/permit cycle	June 30, 2004
	with Permit Renewal Application		December 31, 2004
S10.A	Chemical Analysis of Influent and Effluent (Priority Pollutants)	1/permit cycle	June 30, 2004
S11.	Outfall Evaluation	1/permit cycle	September 30, 2004
G7.	Application for Permit Renewal	1/permit cycle	January 31, 2005

#### **SPECIAL CONDITIONS**

#### S1. DISCHARGE LIMITATIONS

#### A. Effluent Limitations

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit.

The discharge of any pollutant not specifically authorized by this permit in concentrations which violate receiving water quality standards established under section 307(a) of the Clean Water Act or Chapter 173-201A Washington Administrative Code (WAC), shall also be a violation of this permit and the Clean Water Act.

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge municipal wastewater at the permitted location subject to complying with the following limitations:

The interim effluent limits remain in effect until startup is completed after the facility upgrade and are as follows:

	INTERIM EFFLUENT LIMITATIONS: OUTFALL #1		
Parameter	Average Monthly	Average Weekly	
Carbonaceous Biochemical Oxygen Demand* (5 day)	25 mg/L, 3129 lbs/day	40 mg/L, 5007 lbs/day	
Total Suspended Solids*	30 mg/L, 2504 lbs/day	45 mg/L, 3755 lbs/day	
Fecal Coliform Bacteria	200/100 mls	400/100 mls	
pH	Shall not be outside the range 6.0 to 9.0		
Total Residual Chlorine	0.03 mg/L, 2.5 lbs/day	0.09 mg/L, 7.5 lbs/day	
Total Ammonia			
June-August	17 mg/L, 1419 lbs/day	33 mg/L, 2754 lbs/day	
September-May	26 mg/L, 2170 lbs/day	53 mg/L, 4423 lbs/day	

The monthly and weekly averages for  $CBOD_5$  and Total Suspended Solids are based on the arithmetic mean of the samples taken. The averages for fecal coliform are based on the geometric mean of the samples taken.

<sup>\*</sup>The monthly average effluent concentration limitations for CBOD<sub>5</sub> and Total Suspended Solids shall not exceed 25 mg/L and 30 mg/L, respectively, or 15 percent of the respective influent parameters, whichever is more stringent.

The final effluent limits take effect upon completion of startup of the facility upgrade and are as follows:

	FINAL EFFLUENT LIMITATIONS <sup>a</sup> : OUTFALL # 1		
Parameter	Average Monthly	Average Weekly	
Carbonaceous Biochemical Oxygen Demand <sup>b</sup> (5 day)	25 mg/L, 3900 lbs/day	40 mg/L, 5850 lbs/day	
Total Suspended Solids <sup>b</sup>	30 mg/L, 4815 lbs/day	45 mg/L, 7223 lbs/day	
Fecal Coliform Bacteria	200/100 mL	400/100 mL	
pH <sup>c</sup>	Daily minimum is equal to or greater than 6 and the daily maximum is less than or equal to 9.		
Total Residual Chlorine	0.03 mg/L, 7 lbs/day	0.09 mg/L, 20 lbs/day	
Total Ammonia			
(May-October) (November-April)	15 mg/L, 3253 lbs/day 22.8 mg/L, 4944 lbs/day	33.7 mg/L, 7308 lbs/day 51.5 mg/L, 11167	
		lbs/day	

<sup>&</sup>lt;sup>a</sup> The average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.

<sup>&</sup>lt;sup>d</sup> The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For other units of measurement, the daily discharge is the average measurement of the pollutant over the day.

<u>Parameter</u>	Average Monthly	Maximum Daily
Copper	11.2 $\mu$ g/L <sup>(1,3)</sup>	$16.4~\mu g/L^{(1,2)}$
Mercury	$0.21~\mu g/L$	$0.31~\mu g/L$
Lead	$3.1~\mu g/L$	$4.5~\mu g/L$

<sup>&</sup>lt;sup>b</sup> The average monthly effluent concentration for CBOD<sub>5</sub> shall not exceed 25 mg/L (30 mg/L for TSS) or 15 percent of the respective monthly average influent concentrations, whichever is more stringent.

<sup>&</sup>lt;sup>c</sup> Indicates the range of permitted values. When pH is continuously monitored, excursions between 5.0 and 6.0, or 9.0 and 10.0 shall not be considered violations provided no single excursion exceeds 60 minutes in length and total excursions do not exceed seven hours and 30 minutes per month. Any excursions below 5.0 and above 10.0 are violations. The instantaneous maximum and minimum pH shall be reported monthly.

#### Footnotes:

<sup>(1)</sup> The method detection level (MDL) for copper is 1  $\mu$ g/L using graphite furnace atomic absorption spectrometry and method number 220.2 from 40 CFR Part 136. The quantitation level (QL) for copper is 5  $\mu$ g/L (5 x MDL).

This QL will be used for assessment of compliance with these effluent limits. If the Permittee is unable to attain the MDL and QL in its effluent due to matrix effects, the Permittee shall submit a matrix specific MDL and QL to the Department by nine months after the effective date. The matrix specific MDL and QL shall be calculated as follows:

MDL = 3.14 x (standard deviation of seven replicate spiked samples). This corresponds to the calculation of the method detection limit, as defined in 40 CFR Part 136, Appendix B, with the provision that the MDL be calculated for a specific effluent matrix.

The QL =  $5 \times MDL$  Check standards at concentrations equal to the QL shall be analyzed alongside all compliance monitoring samples. Check standards shall be produced independently of calibration standards and maintained as a part of the Permittee's records. All check standard recovery data and duplicate measurements shall be submitted to the Department in the discharge monitoring report. The Department's precision goal is  $\pm -20\%$ .

- (2) If the measured effluent concentration is below the QL as determined in Footnote #1 above, the Permittee shall report NQ for non-quantifiable.
- $^{(3)}$  Average values shall be calculated as follows: measurements below the MDL = 0; measurements greater than the MDL = the measurement.

#### B. Mixing Zone Descriptions

The maximum boundaries of the mixing zones are defined as follows:

The reach of the Columbia River is considered a marine estuary because it is tidally influenced. The current reverses at times from downstream to upstream. Also the diffuser is parallel to the river flow and the river banks. The acute dilution factor is 6.4 and the chronic dilution factor is 15.6.

The chronic mixing zone boundary is not to exceed 235 feet beyond the upstream diffuser port in the upstream direction nor exceed 235 feet beyond the downstream diffuser port in the downstream direction. The width of the chronic mixing zone shall not exceed 25 percent of the width of the Columbia River at the diffuser location.

The acute mixing zone boundaries are ten percent of the chronic mixing zone boundaries or 23.5 feet upstream and downstream of the outboard diffuser ports and not to exceed 2.5 percent of the width of the river.

## **S2. MONITORING REQUIREMENTS**

# A. Monitoring Schedule

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
Wastewater Influent	CBOD5	mg/L	Influent	5/week	24-hour composite
Wastewater Influent	TSS	mg/L	Influent	5/week	24-hour composite
Wastewater Influent	Flow	MGD	Final influent	7/week	*Continuous
Wastewater Effluent	CBOD5	mg/L	Final effluent	5/week	24-hour composite
Wastewater Effluent	TSS	mg/L	Final effluent	5/week	24-hour composite
Wastewater Effluent	Chlorine	mg/L	Final effluent	Daily	Grab
Wastewater Effluent	рН	Standard Units	Final effluent	Daily	Grab
Wastewater Effluent	Total ammonia	mg/L	Final Effluent	1/week	24-hour composite
Wastewater Effluent	Copper Mercury Lead	mg/L	Final Effluent	1/month	24-hour composite
Acute Toxicity Testing, two test organisms	WET Test	Percent survival in 100 percent effluent	Plant effluent	Quarterly for one year	Grab or 24- hour composite
Chronic Toxicity Testing	WET Test	Statistically significant response difference between control and effluent dilution sample	Plant effluent	Quarterly for one year	Grab or 24- hour composite
	I		I		
Ambient	Ammonia, Copper, Mercury, Lead	μg/L or mg/L	Immediately upstream of dilution zone	2 samples each per day for three separate days during critical period.	Grab
Pretreatment	Oil and grease, priority pollutant metals, and cyanide	μg/l or mg/L	Plant influent and effluent	Quarterly	24-hour composite <sup>e</sup> , except grab for O&G

Category	Parameter	Units	Sample Point	Minimum Sampling Frequency	Sample Type
		mg/Kg	Sludge	1 taken within 30 days after influent sample	Grab
Pretreatment	Priority pollutant organics and other toxic	mg/L	Influent	Annually	24 hour composite <sup>e</sup>
	pollutants likely to be present	mg/L	Final effluent	Annually	24-hour composite <sup>e</sup>
		mg/Kg	Sludge	1 taken within 30 days after influent sample	Grab

<sup>\*</sup> Continuous means uninterrupted except for brief lengths of time for calibration, for power failure, or for unanticipated equipment repair or maintenance. Measurement shall be taken hourly when continuous monitoring is not possible.

e. Cyanide, Volatile Organics and Phenols must be taken as a minimum of 4 grab samples and separately analyzed in place of each 24-hour composite.

#### B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Department).

#### C. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations and at a minimum frequency of at least one calibration per year. Calibration records shall be maintained for at least three years.

## D. <u>Laboratory Accreditation</u>

All monitoring data required by the Department shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, conductivity, pH, and internal process control

parameters are exempt from this requirement. Conductivity and pH shall be accredited if the laboratory must otherwise be registered or accredited. The Department exempts crops, soils, and hazardous waste data from this requirement pending accreditation of laboratories for analysis of these media.

## **S3. REPORTING AND RECORDKEEPING REQUIREMENTS**

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit.

## A. Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during each monitoring period shall be summarized, reported, and submitted on a Discharge Monitoring Report (DMR) form provided, or otherwise approved, by the Department. DMR forms shall be received by the Department no later than the 15th day of the month following the completed monitoring period, unless otherwise specified in this permit. Priority pollutant analysis data shall be submitted no later than forty-five (45) days following the monitoring period. The report(s) shall be sent to the Department of Ecology, Southwest Regional Office, P.O. Box 47775, Olympia, Washington 98504-7775.

All laboratory reports providing data for organic and metal parameters shall include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/ number, method detection limit (MDL), laboratory practical quantitation limit (PQL), reporting units, and concentration detected.

Discharge Monitoring Report forms must be submitted monthly whether or not the facility was discharging. If there was no discharge during a given monitoring period, submit the form as required with the words "no discharge" entered in place of the monitoring results.

## B. Records Retention

The Permittee shall retain records of all monitoring information for a minimum of three (3) years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Department.

#### C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place, method, and time of sampling or measurement; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) the individual who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

## D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2 of this permit, then the results of such monitoring shall be included in the calculation and reporting of the data submitted in the Permittee's DMR.

#### E. Noncompliance Notification

In the event the Permittee is unable to comply with any of the terms and conditions of this permit due to any cause, the Permittee shall:

- 1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the noncompliance, correct the problem and, if applicable, repeat sampling and analysis of any noncompliance immediately and submit the results to the Department within 30 days after becoming aware of the violation.
- 2. Immediately notify the Department of the failure to comply.
- 3. Submit a detailed written report to the Department within 30 days [five (5) days for upsets and bypasses], unless requested earlier by the Department. The report shall contain a description of the noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

#### **S4. FACILITY LOADING**

#### A. Design Criteria

Flows or waste loadings of the following design criteria for the permitted treatment facility shall not be exceeded:

Interim Design Criteria:		Final Design Criteria:	
Hydraulic loading limit:	15 MGD	Average flow for the	26.0
		maximum month:	MGD
Average flow for the maximum	10 MGD		
month:		BOD <sub>5</sub> loading for maximum	31,200
		month:	lbs/day
Influent BOD <sub>5</sub> loading for maximum	16,690		
month:	lbs/day	TSS loading for maximum	32,100
		month:	lbs/day
Influent TSS loading for maximum	16,690		
month:	lbs/day		
Design population equivalent:	83,000		

## B. Plans for Maintaining Adequate Capacity

The interim design criteria stays in effect until the plant expansion is completed. The estimated completion year is 2003. When the actual flow or waste load reaches 85 percent of the final design criteria for three consecutive months, or when the projected increases would reach design capacity within five years, whichever occurs first, the Permittee shall submit to the Department, a plan and a schedule for continuing to maintain capacity at the facility sufficient to achieve the effluent limitations and other conditions of this permit. This plan shall address any of the following actions or any others necessary to meet this objective.

- 1. Analysis of the present design including the introduction of any process modifications that would establish the ability of the existing facility to achieve the effluent limits and other requirements of this permit at specific levels in excess of the existing design criteria specified in paragraph A above.
- 2. Reduction or elimination of excessive infiltration and inflow of uncontaminated ground and surface water into the sewer system.
- 3. Limitation on future sewer extensions or connections or additional waste loads.
- 4. Modification or expansion of facilities necessary to accommodate increased flow or waste load.
- 5. Reduction of industrial or commercial flows or waste loads to allow for increasing sanitary flow or waste load.
- 6. Opportunities for water reuse shall to be thoroughly explored and evaluated.

Engineering documents associated with the plan must meet the requirements of WAC 173-240-060, "Engineering Report," and be approved by the Department prior to any construction. The plan shall specify any contracts, ordinances, methods for financing, or other arrangements necessary to achieve this objective.

## C. <u>Duty to Mitigate</u>

The Permittee is required to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment

#### D. Notification of New or Altered Sources

The Permittee shall submit written notice to the Department whenever any new discharge or a substantial change in volume or character of an existing discharge into the POTW is proposed which: (1) would interfere with the operation of, or exceed the design capacity of, any portion of the POTW; (2) is not part of an approved general sewer plan or approved plans and specifications; or (3) would be subject to pretreatment standards under 40 CFR Part 403 and Section 307(b) of the Clean Water Act. This notice shall include an evaluation of the POTW's ability to adequately transport and treat the added flow and/or waste load, the quality and volume of effluent to be discharged to the POTW, and the anticipated impact on the Permittee's effluent [40 CFR 122.42(b)].

## E. <u>Infiltration and Inflow Evaluation</u>

- 1. The Permittee shall conduct an infiltration and inflow evaluation. Refer to the U.S. EPA publication, *I/I Analysis and Project Certification*, available as Publication No. 97-03 at: Publications Office, Department of Ecology, P.O. Box 47600, Olympia, WA 98504-7600. Plant monitoring records may be used to assess measurable infiltration and inflow.
- 2. A report shall be prepared which summarizes any measurable infiltration and inflow. If infiltration and inflow have increased by more than 15 percent from that found in the first report based on equivalent rainfall, the report shall contain a plan and a schedule for: (1) locating the sources of infiltration and inflow; and (2) correcting the problem.
- 3. The report shall be submitted by June 30, 2001, and annually thereafter.

## F. Waste load Assessment

The Permittee shall conduct an annual assessment of their flow and waste load and submit a report to the Department by June 30, 2001, and annually thereafter. The report shall contain the following: an indication of compliance or noncompliance with the permit effluent limitations; a comparison between the existing and design monthly average dry weather and wet weather flows, peak flows, BOD, and total suspended solids loadings; and (except for the first report) the percentage increase in these parameters since the last annual report. The report shall also state the present and design population or population equivalent, projected population growth rate, and the estimated date upon which the design capacity is projected to be reached, according to the most restrictive of the parameters above. The interval for review and reporting may be modified if the Department determines that a different frequency is sufficient.

#### S5. OPERATION AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by a Permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

## A. Certified Operator

Interim Certification Requirements: An operator certified for at least a Class III plant by the state of Washington shall be in responsible charge of the day-to-day operation of the wastewater treatment plant. An operator certified for at least a Class II plant shall be in charge during all regularly scheduled shifts.

Final Certification Requirements: The following final operator certification requirements will become effective at the completion of construction of the new wastewater treatment plant upgrade.

An operator certified for at least a Class IV plant by the state of Washington shall be in responsible charge of the day-to-day operation of the wastewater treatment plant. An operator certified for at least a Class III plant shall be in charge during all regularly scheduled shifts.

Modification Date: June 20, 2002

## B. O & M Program

The Permittee shall institute an adequate operation and maintenance program for their entire sewage system. Maintenance records shall be maintained on all major electrical and mechanical components of the treatment plant, as well as the sewage system and pumping stations.

Such records shall clearly specify the frequency and type of maintenance recommended by the manufacturer and shall show the frequency and type of maintenance performed. These maintenance records shall be available for inspection at all times.

#### C. Short-Term Reduction

If a Permittee contemplates a reduction in the level of treatment that would cause a violation of permit discharge limitations on a short-term basis for any reason, and such reduction cannot be avoided, the Permittee shall give written notification to the Department, if possible, 30 days prior to such activities, detailing the reasons for, length of time of, and the potential effects of the reduced level of treatment. This notification does not relieve the Permittee of their obligations under this permit.

## D. Electrical Power Failure

The Permittee is responsible for maintaining adequate safeguards to prevent the discharge of untreated wastes, or wastes not treated in accordance with the requirements of this permit, during electrical power failure at the treatment plant and/or sewage lift stations, either by means of alternate power sources, standby generator, or retention of inadequately treated wastes. The Permittee shall maintain Reliability Class II (EPA 430-99-74-001) at the wastewater treatment plant, which requires primary sedimentation and disinfection.

#### E. Prevent Connection of Inflow

The Permittee shall strictly enforce their sewer ordinances and not allow the connection of inflow (roof drains, foundation drains, etc.) to the sanitary sewer system.

#### F. Bypass Procedures

Bypass, which is the intentional diversion of waste streams from any portion of a treatment facility, is prohibited, and the Department may take enforcement action against a Permittee for bypass unless one of the following circumstances (1, 2, or 3) is applicable.

1. Bypass for essential maintenance without the potential to cause violation of permit limits or conditions.

Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of this permit, or adversely impact public health as determined by the Department prior to the bypass. The Permittee shall submit prior notice, if possible at least ten (10) days before the date of the bypass.

Modification Date: June 20, 2002

2. Bypass which is unavoidable, unanticipated and results in noncompliance of this permit.

This bypass is permitted only if:

- a. Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.
- b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment downtime (but not if adequate backup equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance), or transport of untreated wastes to another treatment facility.
- c. The Department is properly notified of the bypass as required in Condition S3E of this permit.
- 3. Bypass which is anticipated and has the potential to result in noncompliance of this permit.

The Permittee shall notify the Department at least 30 days before the planned date of bypass. The notice shall contain: (1) a description of the bypass and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of bypass under each alternative; (5) a recommendation as to the preferred alternative for conducting the bypass; (6) the projected date of bypass initiation; (7) a statement of compliance with SEPA; (8) a request for modification of water quality standards as provided for in WAC 173-201A-110, if an exceedance of any water quality standard is anticipated; and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above shall be considered during preparation of the engineering report or facilities plan and plans and specifications and shall be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

The Department will consider the following prior to issuing an administrative order for this type bypass:

- a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of this permit.
- b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.
- c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above, and the adverse effects of the proposed bypass and any other relevant factors, the Department will approve or deny the request. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by the Department under RCW 90.48.120.

#### G. Operations and Maintenance Manual

The approved Operations and Maintenance (O&M) Manual shall be kept available at the treatment plant and all operators shall follow the instructions and procedures of this manual.

An O&M Manual shall be prepared by the Permittee in accordance with WAC 173-240-080 and be submitted to the Department for approval upon completion of construction of the upgraded wastewater facility. Substantial changes or updates to the O&M Manual shall be submitted to the Department whenever they are incorporated into the manual.

The O&M Manual shall include:

- 1. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset or failure.
- 2. Plant maintenance procedures.
- 3. The treatment plant process control monitoring schedule.

#### **S6. PRETREATMENT**

#### A. General Requirements

The Permittee shall work with the Department to ensure that all commercial and industrial users of the publicly owned treatment works (POTW) are in compliance with the pretreatment regulations promulgated in 40 CFR Part 403 and any additional regulations that may be promulgated under Section 307(b) (pretreatment) and 308 (reporting) of the Federal Clean Water Act.

#### B. Wastewater Discharge Permit Required

The Permittee shall not allow significant industrial users (SIUs) to discharge wastewater to the Permittee's sewerage system until such user has received a wastewater discharge permit from the Department in accordance with Chapter 90.48 RCW and Chapter 173-216 WAC, as amended.

#### C. Identification and Reporting of Existing, New, and Proposed Industrial Users

1. The Permittee shall take continuous, routine measures to identify all existing, new, and proposed SIUs and potential significant industrial users (PSIUs) discharging or proposing to discharge to the Permittee's sewerage system (see Appendix B of Fact Sheet for definitions).

- 2. Within 30 days of becoming aware of an unpermitted existing, new, or proposed industrial user who may be an SIU, the Permittee shall notify such user by registered mail that, if classified as an SIU, they shall be required to apply to the Department and obtain a State Waste Discharge Permit. A copy of this notification letter shall also be sent to the Department within this same 30-day period.
- 3. The Permittee shall also notify all PSIUs, as they are identified, that if their classification should change to an SIU, they shall be required to apply to the Department for a State Waste Discharge Permit within 30 days of such change.

## D. <u>Industrial User Survey</u>

- 1. The Permittee shall complete and submit to the Department an Industrial User Survey listing all SIUs and PSIUs discharging to the POTW. The survey shall be received by the Department by June 30, 2004. At a minimum, the list of SIUs and PSIUs shall be developed by means of a telephone book search, a water utility billing records search, and a physical reconnaissance of the service area. Information on PSIUs shall at least include: the business name, telephone number, address, description of the industrial process(es), and the known wastewater volumes and characteristics. For assistance with the development of the Industrial User Survey, the Permittee shall refer to the Department's guidance document entitled "Performing an Industrial User Survey."
- 2. The Permittee shall update the Industrial User Survey each permit cycle. The updated Industrial User Survey shall be received by the Department by the end of the next permit cycle. The updated survey shall include a list of all new industrial users, as well as existing industrial users which are known or discovered to have significantly altered processes or disposal practices since submittal of the last survey or survey update. For industrial users for which there are potentially significant non-domestic discharges, the minimum information described in section D.1 above for PSIUs shall be obtained and included in the report.

#### E. Annual Submittal of List of Industrial Users

The Permittee shall submit annually to the Department a list summarizing all existing and proposed SIUs and PSIUs. This list must be received by the Department by June 30th of each year of the permit.

#### F. Duty to Enforce Discharge Prohibitions

- 1. In accordance with 40 CFR 403.5(a), the Permittee shall not authorize or knowingly allow the discharge of any pollutants into its POTW which cause pass through or interference, or which otherwise violates general or specific discharge prohibitions contained in 40 CFR Part 403.5 or WAC-173-216-060.
- 2. The Permittee shall not authorize or knowingly allow the introduction of any of the following into their treatment works:
  - a. Pollutants which create a fire or explosion hazard in the POTW (including, but not limited to waste streams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21).

- b. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, or greater than 11.0 standard units, unless the works are specifically designed to accommodate such discharges.
- c. Solid or viscous pollutants in amounts that could cause obstruction to the flow in sewers or otherwise interfere with the operation of the POTW.
- d. Any pollutant, including oxygen demanding pollutants, (BOD, etc.) released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW.
- e. Petroleum oil, nonbiodegradable cutting oil, or products of mineral origin in amounts that will cause interference or pass through.
- f. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity which may cause acute worker health and safety problems.
- g. Heat in amounts that will inhibit biological activity in the POTW resulting in interference but in no case heat in such quantities such that the temperature at the POTW headworks exceeds 40°C (104°F) unless the Department, upon request of the Permittee, approves, in writing, alternate temperature limits.
- h. Any trucked or hauled pollutants, except at discharge points designated by the Permittee.
- i. Wastewaters prohibited to be discharged to the POTW by the Dangerous Waste Regulations (Chapter 173-303 WAC), unless authorized under the Domestic Sewage Exclusion (WAC 173-303-071).
- 3. All of the following are prohibited from discharge to the POTW unless approved in writing by the Department under extraordinary circumstances (such as a lack of direct discharge alternatives due to combined sewer service or the need to augment sewage flows due to septic conditions):
  - a. Noncontact cooling water in significant volumes.
  - b. Stormwater, and other direct inflow sources.
  - c. Wastewaters significantly affecting system hydraulic loading, which do not require treatment, or would not be afforded a significant degree of treatment by the system.
- 4. The Permittee shall notify the Department if any industrial user violates the prohibitions listed in this section.

#### S7. RESIDUAL SOLIDS

Residual solids include screenings, grit, scum, primary sludge, waste activated sludge, and other solid waste. The Permittee shall store and handle all residual solids in such a manner so as to prevent their entry into state ground or surface waters. The Permittee shall not discharge leachate from residual solids to state surface or ground waters.

#### **S8. ACUTE TOXICITY**

## A. <u>Effluent Characterization</u>

The Permittee shall conduct acute toxicity testing on the final effluent to determine the presence and amount of acute (lethal) toxicity. The two acute toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Effluent characterization for acute toxicity shall be conducted quarterly for one year. Acute toxicity testing shall follow protocols, monitoring requirements, and quality assurance/quality control procedures specified in this section. A dilution series consisting of a minimum of five concentrations and a control shall be used to estimate the concentration lethal to 50 percent of the organisms ( $LC_{50}$ ). The percent survival in 100 percent effluent shall also be reported.

Testing shall begin within 60 days of the permit effective date. A written report shall be submitted to the Department within 60 days after the sample date. A final effluent characterization summary report shall be submitted to the Department within 90 days after the last monitoring test results are final. This summary report shall include a tabulated summary of the individual test results and any information on sources of toxicity, toxicity source control, correlation with effluent data, and toxicity treatability which is developed during the period of testing.

Acute toxicity tests shall be conducted with the following species and protocols:

- 1. Fathead minnow, *Pimephales promelas* (96 hour static-renewal test, method: EPA/600/4-90/027F).
- 2. Daphnid, *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* (48 hour static test, method: EPA/600/4-90/027F). The Permittee shall choose one of the three species and use it consistently throughout effluent characterization.

#### B. Effluent Limit for Acute Toxicity

The Permittee has an effluent limit for acute toxicity if, after completing one year of effluent characterization, either:

- (1) The median survival of any species in 100 percent effluent is below 80 percent, or
- (2) Any one test of any species exhibits less than 65 percent survival in 100 percent effluent.

If an effluent limit for acute toxicity is required by subsection B at the end of one year of effluent characterization, the Permittee shall immediately complete all applicable requirements in subsections C, D, and F.

If no effluent limit is required by subsection B at the end of one year of effluent characterization, then the Permittee shall complete all applicable requirements in subsections E and F.

The effluent limit for acute toxicity is no acute toxicity detected in a test concentration representing the acute critical effluent concentration (ACEC).

In the event of failure to pass the test described in subsection C of this section for compliance with the effluent limit for acute toxicity, the Permittee is considered to be in compliance with all permit requirements for acute whole effluent toxicity as long as the requirements in subsection D are being met to the satisfaction of the Department.

The ACEC means the maximum concentration of effluent during critical conditions at the boundary of the zone of acute criteria exceedance assigned pursuant to WAC 173-201A-100. The zone of acute criteria exceedance is authorized in Section S.1.B of this permit. The ACEC equals 15.6 percent effluent.

## C. Monitoring for Compliance With an Effluent Limit for Acute Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted quarterly for the remainder of the permit term using each of the species listed in subsection A on a rotating basis and performed using at a minimum 100 percent effluent, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless the Department notifies the Permittee in writing of another species rotation schedule. The percent survival in 100 percent effluent shall be reported for all compliance monitoring.

Compliance with the effluent limit for acute toxicity means no statistically significant difference in survival between the control and the test concentration representing the ACEC. The Permittee shall immediately implement subsection D if any acute toxicity test conducted for compliance monitoring determines a statistically significant difference in survival between the control and the ACEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in survival between the control and the ACEC is less than 10 percent, the hypothesis test shall be conducted at the 0.01 level of significance.

#### D. Response to Noncompliance With an Effluent Limit for Acute Toxicity

If the Permittee violates the acute toxicity limit in subsection B, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted weekly for four consecutive weeks using the same test and species as the failed compliance test. Testing shall determine the  $LC_{50}$  and effluent limit compliance. The discharger shall return to the original monitoring frequency in subsection C after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for acute toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records

(operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the acute toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department-within 60 days after test results are final. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3).

## E. Monitoring When There Is No Permit Limit for Acute Toxicity

The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal. All species used in the initial acute effluent characterization or substitutes approved by the Department shall be used and results submitted to the Department as a part of the permit renewal application process.

#### F. Sampling and Reporting Requirements

- 1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication #WQ-R-95-80, Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.
- 2. Testing shall be conducted on 24-hour composite effluent samples or grab samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.
- 3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.
- 4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.
- 5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.
- 6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

#### **S9. CHRONIC TOXICITY**

#### A. Effluent Characterization

The Permittee shall conduct chronic toxicity testing on the final effluent. The two chronic toxicity tests listed below shall be conducted on each sample taken for effluent characterization.

Testing shall begin within 60 days of the permit effective date. A written report shall be submitted to the Department within 60 days after the sample date. A final effluent characterization summary report shall be submitted to the Department within 90 days after the last monitoring test results are final. This summary report shall include a tabulated summary of the individual test results and any information on sources of toxicity, toxicity source control, correlation with effluent data, and toxicity treatability which is developed during the period of testing.

Effluent testing for chronic toxicity shall be conducted quarterly for one year. The Permittee shall conduct chronic toxicity testing during effluent characterization on a series of at least five concentrations of effluent in order to determine appropriate point estimates. This series of dilutions shall include the ACEC. The Permittee shall compare the ACEC to the control using hypothesis testing at the 0.05 level of significance as described in Appendix H, EPA/600/4-89/001.

Freshwater Chronic	Method	
Fathead minnow	Pimephales promelas	EPA/600/4-91/002
Water flea	Ceriodaphnia dubia	EPA/600/4-91/002

## B. Effluent Limit for Chronic Toxicity

After completion of effluent characterization, the Permittee has an effluent limit for chronic toxicity if any test conducted for effluent characterization shows a significant difference between the control and the ACEC at the 0.05 level of significance using hypothesis testing (Appendix H, EPA/600/4-89/001) and shall complete all applicable requirements in subsections C, D, and F.

If no significant difference is shown between the ACEC and the control in any of the chronic toxicity tests, the Permittee has no effluent limit for chronic toxicity and only subsections E and F apply.

The effluent limit for chronic toxicity is no toxicity detected in a test concentration representing the chronic critical effluent concentration (CCEC).

In the event of failure to pass the test described in subsection C of this section, for compliance with the effluent limit for chronic toxicity, the Permittee is considered to be in compliance with all permit requirements for chronic whole effluent toxicity as long as the requirements in subsection D are being met to the satisfaction of the Department.

The CCEC means the maximum concentration of effluent allowable at the boundary of the mixing zone assigned in Section S.1.B pursuant to WAC 173-201A-100. The CCEC equals 6.4 percent effluent.

## C. Monitoring for Compliance With an Effluent Limit for Chronic Toxicity

Monitoring to determine compliance with the effluent limit shall be conducted quarterly for the remainder of the permit term using each of the species listed in subsection A on a rotating basis and performed using at a minimum the CCEC, the ACEC, and a control. The Permittee shall schedule the toxicity tests in the order listed in the permit unless the Department notifies the Permittee in writing of another species rotation schedule.

Compliance with the effluent limit for chronic toxicity means no statistically significant difference in response between the control and the test concentration representing the CCEC. The Permittee shall immediately implement subsection D if any chronic toxicity test conducted for compliance monitoring determines a statistically significant difference in response between the control and the CCEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in response between the control and the CCEC is less than 20 percent, the hypothesis test shall be conducted at the 0.01 level of significance.

In order to establish whether the chronic toxicity limit is eligible for removal from future permits, the Permittee shall also conduct this same hypothesis test (Appendix H, EPA/600/4-89/001) to determine if a statistically significant difference in response exists between the ACEC and the control.

## D. Response to Noncompliance With an Effluent Limit for Chronic Toxicity

If a toxicity test conducted for compliance monitoring under subsection C determines a statistically significant difference in response between the CCEC and the control, the Permittee shall begin additional compliance monitoring within one week from the time of receiving the test results. This additional monitoring shall be conducted monthly for three consecutive months using the same test and species as the failed compliance test. Testing shall be conducted using a series of at least five effluent concentrations and a control in order to be able to determine appropriate point estimates. One of these effluent concentrations shall equal the CCEC and be compared statistically to the nontoxic control in order to determine compliance with the effluent limit for chronic toxicity as described in subsection C. The discharger shall return to the original monitoring frequency in subsection C after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for chronic toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records,

production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the chronic toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department-within 60 days after test results are final. The TI/RE plan shall be based on WAC 173-205-100(2) and shall be implemented in accordance with WAC 173-205-100(3).

## E. Monitoring When There Is No Permit Limit for Chronic Toxicity

The Permittee shall test final effluent once in the last summer and once in the last winter prior to submission of the application for permit renewal. All species used in the initial chronic effluent characterization or substitutes approved by the Department shall be used and results submitted to the Department as a part of the permit renewal application process.

#### F. Sampling and Reporting Requirements

- 1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication #WQ-R-95-80, Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.
- 2. Testing shall be conducted on 24-hour composite effluent samples or grab samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.
- 3. All samples and test solutions for toxicity testing shall have water quality measurements as specified in Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* or most recent version thereof.
- 4. All toxicity tests shall meet quality assurance criteria and test conditions in the most recent versions of the EPA manual listed in subsection A and the Department of Ecology Publication #WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent.
- 5. Control water and dilution water shall be laboratory water meeting the requirements of the EPA manual listed in subsection A or pristine natural water of sufficient quality for good control performance.
- 6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

#### S10. ADDITIONAL CHEMICAL ANALYSIS OF INFLUENT AND EFFLUENT

## A. General Requirements

The Permittee shall conduct chemical analyses of influent and effluent samples collected from the wastewater treatment system in accordance with protocols, monitoring requirements, and QA/QC procedures specified in this section.

Influent and effluent samples shall be analyzed for priority pollutants.

Influent and effluent sampling shall be timed to coincide with one sampling of the effluent for acute and chronic toxicity. A written report shall be submitted to the Department by June 30, 2004.

## B. Monitoring Requirements

- 1. The following samples shall be collected for analyses: 1) two samples of influent to wastewater treatment, with sampling times at least one week apart; and 2) two samples of effluent from wastewater treatment, collected at such times that results, in conjunction with influent analyses results, may be used to estimate constituent removal efficiencies across the treatment system.
- 2. Each sample of the influent and effluent shall be representative composite consisting of continuous sampling or six grab samples equally spaced over a 24-hour period.

#### C. Protocols

Sample analysis shall be conducted in accordance with 40 CFR Part 136.

## D. Quality Assurance/Quality Control Procedures

#### S11. OUTFALL EVALUATION

The Permittee shall inspect the submerged portion of the outfall line and diffuser to document its integrity and continued function. If conditions allow for a photographic verification, it shall be included in the report. By September 30, 2004, and once per permit cycle thereafter, the inspection report shall be submitted to the Department.

#### **GENERAL CONDITIONS**

## **G1. SIGNATORY REQUIREMENTS**

All applications, reports, or information submitted to the Department shall be signed and certified.

- A. All permit applications shall be signed by either a principal executive officer or a ranking elected official.
- B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - 1. The authorization is made in writing by a person described above and submitted to the Department.
  - 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
- C. Changes to authorization. If an authorization under paragraph B.2 above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph B.2 above must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
- D. Certification. Any person signing a document under this section shall make the following certification:

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

#### **G2. RIGHT OF INSPECTION AND ENTRY**

The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and such other documents as may be required by law:

- A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit.
- B. To have access to and copy at reasonable times and at reasonable cost any records required to be kept under the terms and conditions of this permit.

- C. To inspect at reasonable times any facilities, equipment (including monitoring and\_control equipment), practices, methods, or operations regulated or required under this permit.
- D. To sample or monitor at reasonable times any substances or parameters at any location for purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act.

#### **G3. PERMIT ACTIONS**

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the Permittee) or upon the Department's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

- A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:
  - 1. Violation of any permit term or condition.
  - 2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
  - 3. A material change in quantity or type of waste disposal.
  - 4. A determination that the permitted activity endangers human health or the environment, or contributes to water quality standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR part 122.64(3)].
  - 5. A change in any condition that requires either a temporary or permanent reduction, or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR part 122.64(4)].
  - 6. Nonpayment of fees assessed pursuant to RCW 90.48.465.
  - 7. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.
- B. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:
  - 1. A material change in the condition of the waters of the state.
  - 2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
  - 3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
  - 4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions, or requiring permit revision.
  - 5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR part 122.62.
  - 6. The Department has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.

- 7. Incorporation of an approved local pretreatment program into a municipality's permit.
- C. The following are causes for modification or alternatively revocation and reissuance:
  - 1. Cause exists for termination for reasons listed in A1 through A7 of this section, and the Department determines that modification or revocation and reissuance is appropriate.
  - 2. The Department has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer, (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new Permittee.

#### **G4. REPORTING A CAUSE FOR MODIFICATION**

The Permittee shall submit a new application, or a supplement to the previous application, along with required engineering plans and reports whenever a material change to the facility or in the quantity or type of discharge is anticipated which is not specifically authorized by this permit. This application shall be submitted at least sixty (60) days prior to any proposed changes. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

## **G5. PLAN REVIEW REQUIRED**

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications shall be submitted at least 180 days prior to the planned start of construction unless a shorter time is approved by the Department. Facilities shall be constructed and operated in accordance with the approved plans.

## **G6. COMPLIANCE WITH OTHER LAWS AND STATUTES**

Nothing in this permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

#### **G7. DUTY TO REAPPLY**

The Permittee shall apply for permit renewal at least 180 days prior to the specified expiration date of this permit.

#### **G8. TRANSFER OF THIS PERMIT**

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Department.

## A. Transfers by Modification

Except as provided in paragraph (B) below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

#### B. Automatic Transfers

This permit may be automatically transferred to a new Permittee if:

- 1. The Permittee notifies the Department at least 30 days in advance of the proposed transfer date.
- 2. The notice includes a written agreement between the existing and new Permittees containing a specific date transfer of permit responsibility, coverage, and liability between them.
- 3. The Department does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under this subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

#### **G9. REDUCED PRODUCTION FOR COMPLIANCE**

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails

## **G10. REMOVED SUBSTANCES**

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

#### G11. DUTY TO PROVIDE INFORMATION

The Permittee shall submit to the Department, within a reasonable time, all information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also submit to the Department upon request, copies of records required to be kept by this permit [40 CFR 122.41(h)].

## G12. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

#### **G13. ADDITIONAL MONITORING**

The Department may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

#### **G14. PAYMENT OF FEES**

The Permittee shall submit payment of fees associated with this permit as assessed by the Department.

#### G15. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to \$10,000 and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to \$10,000 for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be deemed to be a separate and distinct violation.

#### G16. UPSET

Definition – "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that: 1) an upset occurred and that the Permittee can identify the cause(s) of the upset; 2) the permitted facility was being properly operated at the time of the upset; 3) the Permittee submitted notice of the upset as required in Condition S3.E; and 4) the Permittee complied with any remedial measures required under S5 of this permit.

In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

### **G17. PROPERTY RIGHTS**

This permit does not convey any property rights of any sort, or any exclusive privilege.

#### G18. DUTY TO COMPLY

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

#### **G19. TOXIC POLLUTANTS**

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

#### **G20. PENALTIES FOR TAMPERING**

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this Condition, punishment shall be a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than four (4) years, or by both.

#### **G21. REPORTING PLANNED CHANGES**

The Permittee shall, as soon as possible, give notice to the Department of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); 2) a significant change in the nature or an increase in quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation of the terms and conditions of this permit.

## G22. REPORTING ANTICIPATED NON-COMPLIANCE

The Permittee shall give advance notice to the Department by submission of a new application or supplement thereto at least 180 days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during noncritical water quality periods and carried out in a manner approved by the Department.

#### **G23. REPORTING OTHER INFORMATION**

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Department, it shall promptly submit such facts or information.

# G24. REPORTING REQUIREMENTS APPLICABLE TO EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS

The Permittee belonging to the categories of existing manufacturing, commercial, mining, or silviculture must notify the Department as soon as they know or have reason to believe:

- A. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels:"
  - 1. One hundred micrograms per liter (100  $\mu$ g/l).
  - 2. Two hundred micrograms per liter (200  $\mu$ g/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500  $\mu$ g/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony.
  - 3. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
  - 4. The level established by the Director in accordance with 40 CFR 122.44(f).
- B. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels:"
  - 1. Five hundred micrograms per liter (500μg/L).
  - 2. One milligram per liter (1 mg/L).
  - 3. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
  - 4. The level established by the Director in accordance with 40 CFR 122.44(f).

### **G25. COMPLIANCE SCHEDULES**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.